REMARKS

This is a full and timely response to the outstanding non-final Office Action mailed January 11, 2005. Claims 1 - 30 remain pending, with no claim amendments having been presented. Reconsideration and allowance of the application and pending claims are respectfully requested.

Withdrawal of Previous Office Action

Applicant acknowledges that the previous Office Action, having been presented in error, has been withdrawn.

Rejections under 35 U.S.C. 103

The Office Action indicates that claims 1-30 are rejected under 35 U.S.C 103(a) as being unpatentable over *Todokoro* (US 6,084,238) in view of *Petrov* (Publication No: 2003/0218133). These rejections are respectfully traversed.

With respect to *Todokoro*, *Todokoro* discloses:

> [I]n the present embodiment, the control electrode is formed along the movement orbit of the sample (wafer) 12. By adopting this structure, even if the position of sample (wafer) 12 is changed due to the movement of the specimen stage 22, ***a fixed retarding voltage can be applied. . .***

(*Todokoro*, col. 12, lines 29-37). (Emphasis Added).

Thus, it is clear that *Todokoro* teaches that the amount of retarding voltage is fixed. *Petrov* does not teach or reasonably suggest otherwise. This is in direct contrast to the features/limitations recited in Applicant's

claims as is described in detail below.

In this regard, claim 1 recites:

> 1. A method for focusing a scanning electron microscope, comprising:
> providing a magnetic lens, an image detector, and a wafer holder;
> providing means for adjusting the position of said wafer holder;
> providing means for supplying a focus current to said magnetic lens;
> providing means for supplying a retarding voltage to said wafer holder;
> placing a wafer on said wafer holder;
> adjusting the position of said wafer holder, thereby adjusting the distance between the wafer placed on said wafer holder and said magnetic lens to a desired focus distance;
> ***adjusting the retarding voltage supplied to said wafer holder*** to achieve a best focus image of the wafer placed on said wafer holder at said image detector, after adjusting the distance between the wafer placed on said wafer holder and said magnetic lens to said desired focus distance; and
> adjusting said focus current to achieve a final focus image of the wafer placed on said wafer holder at said image detector, ***after adjusting the retarding voltage supplied to said wafer holder***.

(*Emphasis Added*).

Applicant respectfully asserts that the cited references, either individually or in combination, do not teach or reasonably suggest the features/limitations emphasized above in claim 1. Therefore, Applicant respectfully asserts that claim 1 is in condition for allowance. Since claims 2 – 15 incorporate the features/limitations of claim 1, Applicant respectfully asserts that these claims also are in condition for allowance. Additionally, these claims recite other features and/or combinations thereof that can serve as an independent basis for patentability.

Notably, a wafer will have accumulated a charge thereon due to previous processing. This charge will give the wafer a voltage, which will tend to repel the incident electron beam from the surface of the wafer. This tends to distort the image seen by the image detector. The retarding voltage is adjusted to counteract the voltage due to the charge on the wafer, thereby potentially achieving a good focus of SEM image.

With respect to claim 16, that claim recites:

> 16. An apparatus for focusing a scanning electron microscope, comprising:
> a magnetic lens, an image detector, and a wafer holder;
> means for adjusting the distance between the wafer placed on said wafer holder and said magnetic lens to a desired focus distance;
> ***a retarding voltage supplied to said wafer holder, wherein said retarding voltage supplied to said wafer holder is adjusted to achieve a best focus image of the wafer placed on said wafer holder at said image detector***, after adjusting the distance between the wafer placed on said wafer holder and said magnetic lens; and
> a focus current supplied to the magnetic lens, wherein said focus current is adjusted to achieve a final focus image, of the wafer placed on said wafer holder, at said image detector ***after adjusting the retarding voltage supplied to said wafer holder***.

(*Emphasis Added*).

Applicant respectfully asserts that the cited references, either individually or in combination, do not teach or reasonably suggest the features/limitations emphasized above in claim 16. Therefore, Applicant respectfully asserts that claim 16 is in condition for allowance. Since claims 17 – 30 incorporate the features/limitations of claim 16, Applicant respectfully asserts that these claims also are in condition for allowance. Additionally, these claims recite other features and/or combinations thereof that can serve as an independent basis for patentability.

Cited Art of Record

The cited art of record has been considered, but is not believed to affect the patentability of the presently pending claims.

CONCLUSION

In light of the foregoing amendments and for at least the reasons set forth above, Applicant respectfully submits that all objections and/or rejections have been traversed, rendered moot, and/or accommodated, and that the pending claims are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

No fee is believed to be due in connection with this Amendment and Response. If, however, any fee is believed to be due, you are hereby authorized to charge any such fee to deposit account No. 20-0778.

Respectfully submitted,

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